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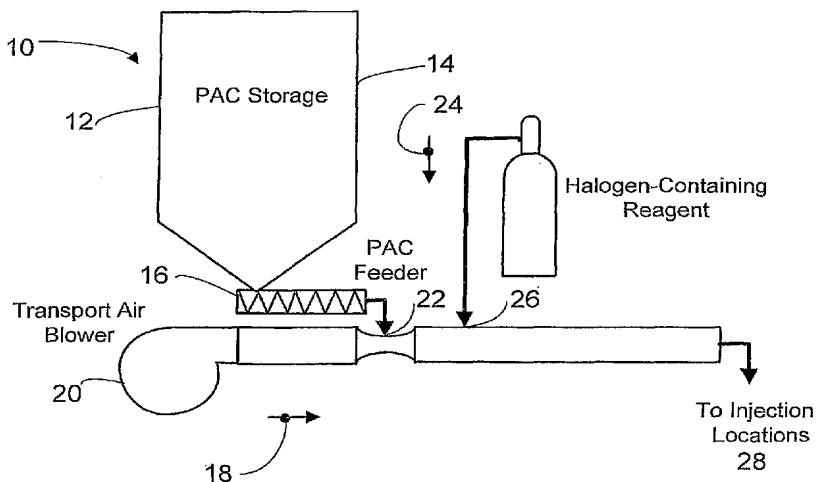
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(54) Title: DYNAMIC HALOGENATION OF SORBENTS FOR THE REMOVAL OF MERCURY FROM FLUE GASES



(57) Abstract: A halogen-containing gas is injected into a flowing transport air/sorbent stream at a point close to the point where the sorbent and transport air first mix to maximize the residence time available for the halogen-containing compound to be adsorbed onto the sorbent surface prior to the sorbent being injected into a flue gas containing mercury. This process maximizes the benefit and utilization of the halogen-containing reagent by placing it exactly where it is needed to facilitate elemental mercury removal - on the surface of the sorbent. The sorbent particles with their loading of adsorbed halogen-containing reagent enter the flue gas with a high reactivity for the removal of elemental mercury.

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